

**REDACTED VERSION OF
DOCUMENT(S) SOUGHT TO BE
SEALED**

1 ORRICK, HERRINGTON & SUTCLIFFE LLP
KAREN G. JOHNSON-MCKEYAN (SBN 121570)
2 kjohnson-mckewan@orrick.com
ANNETTE L. HURST (SBN 148738)
3 ahurst@orrick.com
GABRIEL M. RAMSEY (SBN 209218)
4 gramsey@orrick.com
405 Howard Street, San Francisco, CA 94105
5 Tel: 1.415.773.5700 / Fax: 1.415.773.5759
PETER A. BICKS (*pro hac vice*)
6 pbicks@orrick.com
LISA T. SIMPSON (*pro hac vice*)
7 lsimpson@orrick.com
51 West 52nd Street, New York, NY 10019
8 Tel: 1.212.506.5000 / Fax: 1.212.506.5151

9 BOIES, SCHILLER & FLEXNER LLP
DAVID BOIES (*pro hac vice*)
10 dboies@bsflp.com
333 Main Street, Armonk, NY 10504
11 Tel: 1.914.749.8200 / Fax: 1.914.749.8300
STEVEN C. HOLTZMAN (SBN 144177)
12 sholtzman@bsflp.com
1999 Harrison St., Ste. 900, Oakland, CA 94612
13 Tel: 1.510.874.1000 / Fax: 1.510.874.1460

14 ORACLE CORPORATION
DORIAN DALEY (SBN 129049)
dorian.daley@oracle.com
15 DEBORAH K. MILLER (SBN 95527)
deborah.miller@oracle.com
16 MATTHEW M. SARBORARIA (SBN 211600)
matthew.sarboraria@oracle.com
17 RUCHIKA AGRAWAL (SBN 246058)
ruchika.agrawal@oracle.com
18 500 Oracle Parkway,
Redwood City, CA 94065
19 Tel: 650.506.5200 / Fax: 650.506.7117

20 *Attorneys for Plaintiff*
ORACLE AMERICA, INC.

21 UNITED STATES DISTRICT COURT
22 NORTHERN DISTRICT OF CALIFORNIA
23 SAN FRANCISCO DIVISION

24 ORACLE AMERICA, INC.
25 Plaintiff,
26 v.
27 GOOGLE INC.
28 Defendant.

Case No. CV 10-03561 WHA
ORACLE'S RESPONSE TO ECF NO. 1598 RE: FOURTH FAIR USE FACTOR
Dept.: Courtroom 8, 19th Floor
Judge: Honorable William H. Alsup

1 The fourth factor of fair use considers “the effect of the use upon the potential market for
 2 or value of the copyrighted work.” 17 U.S.C. §107. It is the “undoubtedly the single most
 3 important element of fair use.” *Oracle Am., Inc. v. Google Inc.*, 750 F.3d 1339, 1376 (Fed. Cir.
 4 2014) (quoting *Harper & Row Publ’rs, Inc. v. Nation Enters.*, 471 U.S. 539, 566-67 (1985)).

5 **I. RELEVANT LEGAL FRAMEWORK FOR THE FOURTH FAIR USE FACTOR.**

6 ***Value of Entire Bundle.*** The *value* of a copyrighted work includes the *entire bundle* of
 7 rights associated with the work under § 106. Section 106 grants the owner of a work the “exclu-
 8 sive rights” to reproduce, prepare derivative works, distribute, and publicly perform and display
 9 works. 17 U.S.C. §106. Section 106 grants the owner the exclusive right not only to do these
 10 things herself, but also to *authorize* others to do them. *Id.* The 1976 Copyright Act for the first
 11 time made significant the “divisibility” of these rights—the broad latitude to exploit the rights
 12 independently of one another in order to maximize the value of the bundle. 17 U.S.C. §202; *see* 3
 13 Nimmer on Copyright § 10.02. Authors and publishers depend upon this understanding of § 106,
 14 as they often do not commercialize works by themselves. For example, J.K. Rowling did not
 15 write the *Harry Potter* screenplays or produce the films by herself. But she and her publisher had
 16 every expectation that the right to license others to do so was part of the value of her works.

17 Thus, when the fourth factor considers “value,” it must include consideration of not only
 18 the right of reproduction under Section 106(1), but also the rest of these exclusive rights. It must
 19 include not only the right to do these things oneself, but also to obtain licensing revenue by per-
 20 mitting others to do them. The *value* of the work includes the right to make derivative works
 21 under § 106(2), the right to decide how and whether to publish and distribute the work under §
 22 106(3), the right to publicly display and perform under § 106(4) & (5), and the right to authorize
 23 anyone else to do these things. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 593 (1994)
 24 (“Evidence of substantial harm to it [the derivative market] would weigh against a finding of fair
 25 use, because the licensing of derivatives is an important economic incentive to the creation of
 26 originals.” (citing 17 U.S.C. § 106(2)); *Harper & Row*, 471 U.S. at 568 (“If the defendant’s work
 27 adversely affects the value of any of the rights in the copyrighted work (in this case the adaptation
 28 and serialization right) the use is not fair.” (quotation marks omitted)); *Micro-Star v. Formgen*,

1 *Inc.*, 154 F.3d 1107, 1113 (9th Cir. 1998) (“Only [copyright owner] has the right to enter that
 2 market; whether it chooses to do so is entirely its business”); *A&M Records, Inc. v. Napster, Inc.*,
 3 239 F.3d 1004, 1017 (9th Cir. 2001) (“Moreover, lack of harm to an established market cannot
 4 deprive the copyright holder of the right to develop alternative markets for the works.”).

5 So, for example, in *Harper & Row*, the *Nation* published a review of President Ford’s
 6 about-to-be published memoir of the Nixon resignation. The *Nation*’s review quoted key
 7 passages, including President Ford’s description of the Friday night massacre in his own words.
 8 Harper & Row had granted serialization rights to *Time* magazine. Serialization rights are a form
 9 of derivative work—the right to publish portions of the book seriatim in several issues of the
 10 magazine. *Time* was so incensed by the *Nation*’s scoop of the key Ford passages that it cancelled
 11 the contract. The *Nation*’s review had substituted for the right to publish those critical passages
 12 in *Time*’s planned adaptation. Harper & Row was not claiming that it could never publish at all
 13 because the *Nation* had destroyed the market for the book. Nonetheless, that single instance of
 14 harm to the value of the derivative work *license* counted heavily against fair use.

15 In *Campbell*, the Court was concerned with the potential for the parody rap version of
 16 *Pretty Woman* at issue to substitute for a licensed rap derivative. 510 U.S. at 593. In that case,
 17 the Court found that a parody might be fair use, but reversed summary judgment because the
 18 defendant had failed to meet its burden of proof to put in evidence of lack of economic harm on
 19 the fourth factor. *Id.* at 594 (“[I]t is impossible to deal with the fourth factor except by recogniz-
 20 ing that a silent record on an important factor bearing on fair use disentitled the proponent of the
 21 defense”). A rap derivative was a potential adaptation. Defendant had failed to sustain its
 22 burden of proof to show the absence of harm to that potential derivative market.

23 **Potential Markets.** The fourth factor also considers harm to *potential markets* for the
 24 work. *Campbell*, 510 F.3d at 590 (factor four considers both “the extent of market harm” and the
 25 effect “on the potential market” (quotation marks omitted)). Potential markets can take many
 26 forms. They might be new markets for exploitation of the existing work, markets for exploitation
 27 of existing derivatives of the work, or new markets for a yet-to-be-developed derivative of the
 28 work. The distribution right protects the exclusive right to disseminate the work in any form.

1 Even purely hypothetical markets—that is, even markets which the copyright owner *has no*
 2 *intention to exploit*—are protected. *See Monge v. Maya Magazines, Inc.*, 688 F.3d 1164, 1180-81
 3 (9th Cir. 2012) (“little doubt” of market harm even where celebrity-plaintiffs “did not intend to
 4 sell” pictures of their wedding when a tabloid published the pictures); *Worldwide Church of God*
 5 *v. Phila. Church of God, Inc.*, 227 F.3d 1110, 1119 (9th Cir. 2000) (potential market harm even
 6 where “author ... disavowed any intention to publish his work during his lifetime ... because the
 7 relevant consideration was the ‘potential market’ and ... he has the right to change his mind”). In
 8 other words, the distribution right grants the exclusive right to the owner to determine *if* it will
 9 disseminate in a particular market—not just how. *Micro-Star*, 154 F.3d at 1113. Because the
 10 exclusive rights include the right to authorize others, the jury must consider not only harm to the
 11 owner from the owner’s direct exploitation of the work, but also harm in the form of *loss of lic-*
 12 *ensing revenues*. *Campbell*, 510 U.S. at 592 (“The market for potential derivative uses includes
 13 only those that creators of original works would in general develop or license others to develop”).

14 The scope of protected potential derivative markets, including licensing markets, thus
 15 includes any “traditional, reasonable, or likely to be developed markets.” *Seltzer v. Green Day,*
 16 *Inc.*, 725 F.3d 1170, 1179 (9th Cir. 2013). These are not purely hypothetical markets, they are
 17 *normal* markets. *Harper & Row*, 471 U.S. at 568 (fourth factor concerned with “use that
 18 supplants any part of the *normal* market for a copyrighted work” (emphasis added)).

19 One of the key Ninth Circuit cases on potential markets under the fourth factor is *Napster*.
 20 Defendant’s distribution software was innovative technology and arguably a far more efficient
 21 form of distribution of sound recordings than the music industry had yet developed. Yet the
 22 Ninth Circuit soundly rejected the claim of fair use. *Napster* was not entitled to usurp the digital
 23 downloads market for MP3 recordings even if the publishers had not yet exploited it:

24 We, therefore, conclude that the district court made sound findings related to
 25 Napster’s deleterious effect on the present and future digital download market.
 26 Moreover, lack of harm to an established market cannot deprive the copyright
 27 holder of the right to develop alternative markets for the works.... [T]he record
 28 supports the district court’s finding that the ‘record company plaintiffs have
 already expended considerable funds and effort to commence Internet sales and
 licensing for digital downloads.’ Having digital downloads available for free on
 the Napster system necessarily harms the copyright holders’ attempts to charge for
 the same downloads.

239 F.3d at 1017 (citations and quotation marks omitted).

As the court also noted in *Napster*, the proof required to demonstrate present or future market harm varies with the purpose and character of the use under the first factor:

A challenge to a noncommercial use of a copyrighted work requires proof either that the particular use is harmful, or that if it should become widespread, it would adversely affect the potential market for the copyrighted work.... If the intended use is for commercial gain, that likelihood [of market harm] may be presumed. But if it is for a noncommercial purpose, the likelihood must be demonstrated.

Id. at 1016 (quoting *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 451 (1984)).

Therefore, if the potential market is “traditional, reasonable or likely to be developed,” and the use is for the defendant’s commercial gain, the fourth factor must favor the plaintiff.

Widespread Use of the Type at Issue. Finally, the fourth factor explicitly requires consideration of the potential for widespread use. This hypothetical is a thought experiment designed to consider in advance the *consequences* of a finding of fair use to the copyrighted work (indeed, any other copyrighted work that might find itself in a similar position). This hypothetical is considered because once a particular use is declared fair, *anyone else* in similar circumstances can take advantage of that declaration. If it is fair for Google to take 37 API packages and make tons of money without paying, then it is fair for anybody else to do the same. Properly applied, the fourth factor requires the jury to consider

not only the extent of market harm caused by the particular actions of the alleged infringer, but also whether unrestricted and widespread conduct of the sort engaged in by the defendant would result in a substantially adverse impact on the potential market for the original. The enquiry must take account not only of harm to the original but also of harm to the market for derivative works.

Campbell, 510 U.S. at 590 (quotation marks and ellipsis omitted).

II. APPLICATION OF THESE LEGAL PRINCIPLES TO THIS CASE.

The Court has asked the question whether the jury’s inquiry regarding harm is limited to harm to “the copyrighted work itself” or whether the jury must also consider “uncopyrighted hypothetical products that might have included elements of the copyrighted work in an alternative universe.” ECF 1598. The short answer, as demonstrated above, is that the fourth factor considers the effect on the actual and potential market for and value of not only Java SE 1.4 and 5.0 but also their derivatives and any normal, traditional, reasonable or likely markets. Here, there was

1 tremendous harm to an existing market for a derivative work (Java ME), and also harm to markets
2 that Sun/Oracle, before Android arrived on the scene, were licensing to develop.

3 These facts have nothing to do with harm to “uncopyrighted hypothetical products.” All
4 of these works are copyrighted. Copyright subsists from the moment of creation. 17 U.S.C. §§
5 102, 302(a). Registration is not a necessary prerequisite for the existence of copyright. *S.O.S.,*
6 *Inc. v. Payday, Inc.*, 886 F.2d 1081, 1085 (9th Cir. 1989). A derivative work is any work that
7 incorporates a sufficient amount of the original to be infringing were it made without permission.
8 *Mirage Ed., Inc. v. Albuquerque A.R.T. Co.*, 856 F.2d 1341, 1343 (9th Cir. 1988); *see* 1 Nimmer
9 § 3.01, at 3-3. Accordingly, Java ME is not a hypothetical product, and it is not uncopyrighted.
10 Java ME is an existing, copyrighted form of derivative work of Java SE 1.4 and 5—it is derived
11 from Java SE. 3/14/16 Astrachan Depo. 101:22-25 ([REDACTED]
12 [REDACTED]); Bloch Depo. 45:1-12 (“Java ME derived from the platform formerly known as Java,
13 currently known as Java SE”); 3/15/16 Reinhold Depo. 92:15-93:6 (“parentage relationship”).

14 There is nothing hypothetical about Java SE 6, 7, or 8, either. While the trial will not
15 pertain to infringement of these Java SE versions, ECF No. 1479, Java SE 6, 7, and 8 are copy-
16 righted derivatives of Java SE 1.4 and 5, *e.g.*, TX 659 (registration for Java SE 6), OAGOOGL-
17 3000000496 (Java SE 7), and thus harm to those works must also be taken into account.

18 ***Mobile phones.*** Java SE and Java ME on mobile devices, including smartphones, was
19 also not hypothetical. The Federal Circuit already found that “Sun was licensing a *derivative ver-*
20 *sion* of the Java platform for use on mobile devices: the Java Micro Edition (‘Java ME’),” and
21 that “Oracle licensed Java ME for use on feature phones and smartphones.” 750 F.3d at 1350.
22 Android devastated Java ME, as its share of mobile phones plummeted from 80% of the market
23 and 1 billion Java-enabled phones to nearly nothing—as Android grew to 80% market share. TX
24 134 at 3. Under *Harper & Row* and *Campbell*, factor four “must take account” of harm to Java
25 ME as a derivative, to do otherwise would be reversible error.

26 As early as 1998, Sun licensed Java ME for use in mobile phones. Motorola was Sun’s
27 first Java ME licensee. OAGOOGL0102005520. In 2000, RIM licensed Java ME for Black-
28 Berry smartphones. OAGOOGL0100001750. Nokia also licensed Java ME and SE for use in

1 smartphones. TX 9048. The market for licensing Java ME, as well as Java SE, has been
 2 decimated by Android. As a Java sales consultant stated regarding his discussions with carriers:
 3 “I see Android and am run over by it in all accounts.” TX 550. To take one example, in 2012,
 4 Samsung licensed Java ME for [REDACTED] for mobile phones. TX 5965. In 2015, Samsung
 5 renewed the license for only [REDACTED]. *Id.*

6 When Android set out to create a Java SE-based smartphone platform it was following the
 7 existing trajectory of the market. It was no surprise to anybody that the power of smaller com-
 8 puting devices would become sufficient to enable the exploitation of Java SE in mobile phones.
 9 Moore’s law made that obvious. *See* 4/5/11 Rubin Depo. 134:2-6 ([REDACTED])
 10 [REDACTED]
 11 [REDACTED]). In 2003 and 2006, Sun licensed other companies to exploit Java SE in phones:
 12 both SavaJe and Nokia. TX 5959 (“The API for the SavaJe OS is the full range of J2ME and
 13 J2SE APIs. SavaJe is a Sun commercial J2SE licensee.”); TX6176 (Nokia Technology License
 14 and Distribution Agreement, June 28, 2006). In 2006, SavaJe was in the market with the “Device
 15 of the Show” at JavaOne, a smartphone containing both Java ME and Java SE as a strategy to
 16 bridge from one platform to the next. OAGOOGL2000179813. Danger was also in the market
 17 with a Java SE-based phone. OAGOOGL30000032347.

18 The founders of Android knew all about this activity to develop the potential market for
 19 Java SE in mobile phones in general, and smartphones in particular, because they were directly
 20 involved in it. Andy Rubin was the CEO of Danger when it took a license from Sun. *See*
 21 TX 1026 (Danger Sun Community Source License). Rubin understood that Java SE would
 22 become usable in phones. Rubin 4/5/11 Depo. at 134:6-9 ([REDACTED])
 23 [REDACTED]
 24 [REDACTED]). Another Android founder, Rich Miner, performed the
 25 due diligence on an Orange investment in SavaJe. [http://www.bizjournals.com/boston/blog/](http://www.bizjournals.com/boston/blog/mass-high-tech/2010/09/oracle-ip-suit-against-google-tied-to-boston.html)
 26 [mass-high-tech/2010/09/oracle-ip-suit-against-google-tied-to-boston.html](http://www.bizjournals.com/boston/blog/mass-high-tech/2010/09/oracle-ip-suit-against-google-tied-to-boston.html); TX 6499. Miner also
 27 knew that companies were planning to use Java SE in mobile phones—that was SavaJe’s business
 28 plan. *Id.* SavaJe had years of investment from key players in the industry—T-Mobile, Orange

1 and Vodafone—and was fully poised for success. Indeed, Miner attributed his experience in
 2 evaluating SavaJe as fundamental to his desire to found Android. [http://www.bizjournals.com/](http://www.bizjournals.com/boston/blog/mass-high-tech/2010/09/oracle-ip-suit-against-google-tied-to-boston.html)
 3 [boston/blog/mass-high-tech/2010/09/oracle-ip-suit-against-google-tied-to-boston.html](http://www.bizjournals.com/boston/blog/mass-high-tech/2010/09/oracle-ip-suit-against-google-tied-to-boston.html).

4 Java SE was both reasonable and likely in mobile phones by 2003 when licenses were
 5 granted, and certainly by 2006 when product was coming onto the market. *SavaJe failed not*
 6 *because there was no market but because Android killed it.* Though the Android SDK was not
 7 announced until November 2007 and the Android commercial release not until October 2008,
 8 Google had been on the road putting together the Open Handset Alliance eighteen months before
 9 releasing the SDK in late 2007. TX 9015, 5259, 158, 387, 5279, 5278, 5277, 5261, 5260, 5287,
 10 5596, 5240, 5583, 5276, 5285, 5560, 6437, 3165, 5571, 6436, 5282, 5283, 815, 32, 5573, 5569,
 11 5605, 5606, 5289, 5290, 5579. Android viewed Sun and Danger as competition. TX 207 at 1;
 12 TX 9014 at -137; TX 6287 at -946. Google made presentations to nearly all of SavaJe’s invest-
 13 ors. TX 9015, TX 5261(Presentations to [REDACTED]); TX 387, (Presentation to [REDACTED]); TX 5277, TX
 14 5569 (Presentations to [REDACTED]); TX 5276 (Presentation to [REDACTED]). Google then watched
 15 SavaJe go under—and took credit for it: [REDACTED]
 16 [REDACTED]” TX 5322 at -944. By the time Sun acquired SavaJe
 17 in April 2007, Google had already killed it.

18 And it was not just because Sun/Oracle could not “compete with free.” Sun/Oracle had to
 19 compete with Google promising carries, device manufacturers, and app developers *revenue*
 20 *sharing* to get them to adopt Android and steer the advertising revenue Google’s way. Google
 21 has produced numerous revenue sharing agreements that Oracle intends to rely on at trial. *E.g.*,
 22 TX 5690 ([REDACTED]); TX 5212 ([REDACTED]); TX 5695 ([REDACTED]). And, most remarkable of all,
 23 *Google was selling Sun’s own technology* to the carriers and OEMs. Presentation after presen-
 24 tation by Google touted the benefits of a Java-based system in Android. *Supra* (collecting presen-
 25 tations). These presentations explicitly extolling the virtues of a Java-based smartphone platform
 26 did not cease after Google broke off licensing talks with Sun, they continued right up until days
 27 before Android was released commercially. *Id.*; TX 5569 (August 27, 2008 presentation).

28 This case is *Napster* without the injunction: an advertising-supported-monetization model

1 in a market the copyright owner had already targeted for development. There, the record industry
 2 had taken preliminary steps to exploit digital downloads but hadn't yet entered the market. Here,
 3 Sun took far more concrete steps to exploit Java SE in mobile phones by granting licenses and
 4 watching its licensees enter the market. Android then killed any other opportunity for Java SE
 5 (and derivatives) in mobile phones. Android *is* a Java SE-based derivative work for mobile
 6 devices. There is nothing hypothetical or "alternative universe" about it.

7 The market harm to Java SE and its derivatives is not limited just to phones. As detailed
 8 at length in Prof. Jaffe's report, Oracle business records and the testimony of Oracle's witnesses
 9 evidence that Android has devastated the market for Java SE and its derivatives across many
 10 device markets. *See* ECF No. 1560-7-8 (Jaffe Op. Rpt.) ¶¶ 330-420.

11 ***Tablets and e-readers.*** Amazon licensed Java ME for use in the original Kindle in 2007.
 12 TX 5061. When Amazon developed the Kindle Fire, Amazon took a license to Android, rather
 13 than taking a license to Java SE or ME. 12/16/15 Saab Depo. 58:6-12, 62:11-19. Not only did
 14 Oracle lose out on licensing for the Kindle Fire itself, Oracle also lost opportunities to license
 15 Java SE or ME on other Kindle Fire products, all of which run on Android, even though the
 16 Amazon e-reader has since moved to Java SE. TX 5329.

17 ***Automotive.*** In 2000, Sun and DaimlerChrysler signed an agreement for the development
 18 on an internet-capable graphical user interface. OAGOOGL0100060485. In 2001, Sun began
 19 licensing Java ME to OnStar, a subsidiary of GM, for use in on-board GPS tracking and wireless
 20 communications. *See* OAGOOGL0100005830. Oracle also licenses Java SE to, among others,
 21 MicroDoc, a company that builds software implementations for the automotive industry, includ-
 22 ing manufacturers such as Audi and Volkswagen. TX 6192. Google entered the market [REDACTED]

23 [REDACTED]
 24 [REDACTED] 12/08/15 Lockheimer Depo. 100:15-101:14; TX 5064 ("The huge battle to
 25 win the initiative is under go today.... Google pushing Android but only Honda is using. I also
 26 hear Nissan goes to Android.").

27 ***Televisions and set-top boxes.*** Java SE was originally developed in the early 1990s for
 28 use in connection with televisions. 3/31/16 Stahl Depo. 41:11-21. Sun/Oracle licensed Java TV,

1 a Java ME-based technology in televisions and set-top boxes as early as 1998. OAGOOGL-
 2 0000061306. In 2008, Sun and SBTVD, a Brazilian nonprofit organization, signed a Technology
 3 Exchange and Cooperation Agreement to develop Ginga-J, a Java-based digital television stan-
 4 dard for Brazil. OAGOOGL0025960408, -0102231984. While Java was in televisions long
 5 before Android, Google has released Android TV and television manufacturers (such as Sony,
 6 Vision/Philipps and Sharp) now license Android. [http://www.engadget.com/2014/06/25/](http://www.engadget.com/2014/06/25/android-tv-is-coming-to-sony-sharp-and-philips-tvs-next-year)
 7 android-tv-is-coming-to-sony-sharp-and-philips-tvs-next-year; Lockheimer Depo. 94:18-95:11.

8 Sun and Oracle also licensed Java for use by set-top box manufacturers, including Scien-
 9 tific Atlanta. 12/2/15 Ringhofer Depo. 117:5-7, 119:25-120:22. That business has declined as
 10 Android TV has been incorporated into set-top boxes. *Id.*; TX 5060 (customer saw “fast adoption
 11 of Android in the STB/Media market” and decided to focus on Android-based solution): TX 5634
 12 (customer bargaining down price because it is “prepared to migrate [Android] licenses”).

13 ***Wearables.*** In 1998, Sun created the “Java Ring,” a ring embedded with a microprocessor
 14 running Java. OAGOOGL3000000370. Oracle has attempted to license Java for wearables to
 15 Samsung, LG Electronics and GE Healthcare, among others, but has largely been unsucces-
 16 ful. 12/2/15 Ringhofer Depo. 83:6-10 (“We’re pursuing [Samsung] to get them on a Smartwatch.
 17 We lost that to Android.”); OAGOOGL2000131360 (licensing opportunity for Java to LG Elec-
 18 tronics for wearables); OAGOOGL2000128379 (“not a java embedded opportunity and the de-
 19 vice platform chosen is Android”). Android Wear occupies 17% of the wearable market, possibly
 20 increasing to one-third market share by 2019. [http://venturebeat.com/2015/09/14/idc-android-](http://venturebeat.com/2015/09/14/idc-android-wear-market-share-will-more-than-double-by-2019)
 21 wear-market-share-will-more-than-double-by-2019; Lockheimer Depo. 98:22-99:9, 357:5-11.

22 ***VoIP.*** Since 2003, Cisco licensed Java ME and Java SE for use in Voice over Internet
 23 Protocol phones. TX 6174. Oracle understood that Android would harm this market. TX 5059
 24 (“Launch of Android-based VOIP multi-purpose tablet likely to carve into traditional VOIP
 25 phone customer base ... Java cost an issue for emerging markets ... especially when compared
 26 with Android”). And Android did carve up Java’s licensing opportunities. Cisco recently
 27 licensed Android for use in most of its VoIP phones, leaving Java ME only in the “legacy”
 28 phones. 12/2/15 Ringhofer Depo. 127:18-129:25.

Internet of Things. Oracle licenses Java SE for use in Internet of Things products, such as Cisco’s ATT Digital Life Gateway and GE’s gateway. OAGOOGL2008729473. Oracle also licenses Java ME for, among others, Honeywell’s building automation sensors. *Id.* [REDACTED]

Household Appliances. Oracle has tried to license Java in household appliances, but has again run into Android’s presence in the market. For example, Oracle sought to license Java to General Electric Appliances, but “lost to Android.” *See, e.g.*, TX 5633. Oracle has also attempted to license Java to Samsung for household appliances, but has lost out on those deals because Google gives Android (containing Java) away for free while Oracle charges for Java. OAGOOGL2000023783 (“do not want to use Java on Samsung device because they believe Android is free, but Java is expensive. This is quite a challenge for Java.”).

Printers. Oracle has licensed Java SE for printers, such as to Samsung since 2010 and to Lexmark since 2012. TX 6184, TX 6189. Android now competes in the printer market. Even though Lexmark recently licensed Java for printers, it did so at a significant discount using Android as a price pressure point. 4/6/16 Smith (Rough) Depo. 19:22-20.9, 93:24-94.7.

* * *

As the above demonstrates, these markets are all actual, normal, traditional and reasonable markets for Java SE and its derivatives. In fact, Java was present in many of these markets first, only to be pushed out by Android. The fact that Android has usurped the opportunity to exploit Java SE and its derivatives in the marketplace is exactly the kind of harm under the fourth factor that is *dispositive* in Oracle’s favor. *Harper & Row*, 471 U.S. at 566-67 (“Fair use, when properly applied, is limited to copying by others which does not materially impair the marketability of the work which is copied.”); *Napster*, 239 F.3d at 1016 (same). The harm to Oracle’s actual and potential markets for Java SE 1.4 and 5.0 and its derivatives is substantial and weighs strongly in favor of Oracle and against Google’s defense of fair use.

1 Dated: April 11, 2016

Respectfully submitted,

2 Orrick, Herrington & Sutcliffe LLP

3 By: /s/ Annette L. Hurst

4 Annette L. Hurst

5 Counsel for ORACLE AMERICA, INC.

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28